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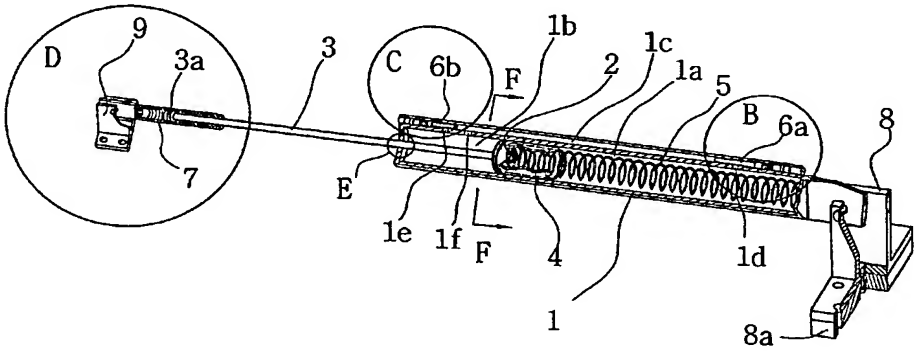
(54) Title: DOOR CLOSER



(57) Abstract: The present invention relates to an apparatus for closing the door slowly and automatically, and it is commonly used in the name of door closer in the market. The conventional door closer has a complicated structure and causes much energy loss because the compressing force of the compression spring in the body is transferred through a gear. However, the present invention can directly get the door closed by the piston rod without passing through a gear, so that the energy loss is little, and a small amount of air is contained in the hydraulic oil in order for the piston and the piston rod to be moved to the left and right hand side. The closing speed of the door can be adjustable by turning a speed adjustment bolt. The installed conventional door closet must be disassembled and reassembled for a force adjustment to adjust the opening and closing force of the door, and it was very difficult to install the conventional door closer due to the adjustment of mounting position to the door and the doorframe and the length of the link. However, the present invention can be simply adjusted for the force adjustment by turning the force adjustment nut when it is installed, and for the installation, it is very easy to install the present invention since the function of the invention works with a force adjustment by turning the force adjustment nut when the invention is fixed to the door and doorframe. The invention can be applied to all kinds of small- or big-sized opening and closing doors including a plastic door, an aluminum door, a wood door, and a steel door to close slowly and automatically.

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